

SEWAGE INFLUENT, NOGALES INTERNATIONAL TREATMENT PLANT

DESCRIPTION: One 61-centimeter Parshall flume with a water-stage recorder is located at the international boundary for measuring raw wastewater from Nogales, Sonora. The plant influent and effluent flows are measured by flow meters and recorded on individual chart recorders and continuous totalizers. The Nogales Wash Pumping Plant flows are contaminated surface waters from Mexico captured in the U.S. and pumped into the international sewer trunk line downstream of the influent recorder. Flows determined by pump hour clocks. The Nogales International Treatment Plant is located adjacent to I-19, approximately 14.5 kilometers north of the international boundary, all within the City of Nogales, Santa Cruz County, Arizona.

RECORDS: Flows from the United States are deduced from total plant influent less the flows measured crossing the international boundary from Mexico. Records available: Continuous monthly record for plant influent since August 1951; daily records for plant influent, January 1952 through 2001.

REMARKS: Nogales International Treatment Plant treats combined sewage from both Nogales, Arizona and Nogales Sonora by means of aerated stabilization lagoons. In February 1991, a plant expansion was completed which increased the capacity to 65.1 thousand cubic meters per day. Ultraviolet disinfected effluent is discharged directly into the Santa Cruz River. Prior to the expansion, the plant capacity was 31.0 thousand cubic meters per day and chlorinated effluent was discharged directly to the Santa Cruz River. Prior to December 18, 1971 the plant was located along the right bank of Nogales wash, approximately 3.2 kilometers north of the international boundary.

Month	Total Monthly Flows				Daily Flows-Thousand Cubic Meters Per Day						
	Thousand Cubic Meters				Current Year 2001			Period 1952-2001			
	U.S.	Mexico	Plant*	Total	Maximum	Minimum	Mean	Maximum	Minimum	Mean	
Jan.	587	1,469	0	2,056	78.9	57.8	66.3	93.0	2.5	25.1	
Feb.	490	1,373	0	1,863	73.9	62.6	66.5	80.4	2.5	25.7	
Mar.	763	1,292	0	2,055	72.6	61.9	66.3	85.7	2.8	25.6	
April	701	1,264	0	1,965	87.9	58.1	65.5	87.9	2.6	24.2	
May	539	1,419	0	1,958	69.2	56.9	63.2	69.2	2.1	22.8	
June	480	1,292	0	1,772	64.9	55.5	59.1	64.9	2.6	21.3	
July	606	1,238	0	1,844	65.1	54.3	59.5	68.1	2.6	22.2	
Aug.	501	1,177	0	1,678	56.4	51.9	54.1	75.6	2.8	23.8	
Sept.	324	1,271	0	1,595	55.8	51.0	53.1	67.9	3.0	25.1	
Oct.	437	1,214	0	1,651	83.3	49.1	53.2	87.2	2.6	25.4	
Nov.	242	1,219	0	1,461	52.1	45.1	48.7	84.7	3.0	25.1	
Dec.	504	1,199	0	1,703	63.5	49.8	54.9	75.9	1.3	25.2	
Yearly	6,174	15,427	0	21,601	87.9	45.1	59.2	93.0	1.3	24.3	

* Nogales Wash Pumping Plant